

ABSTRACT OF THE DISCLOSURE

Sub 917

Disclosed is a semiconductor laser having an S-ARROW structure confining a basic lateral mode light between a pair of guide layers extending with a gap therebetween, which increases a precision of a shape of a guide portion, and is capable of stably emitting a light in the basic lateral mode. In the semiconductor laser having an activation layer and a plurality of layers in parallel with the activation layer, a first groove penetrating through at least some of the layers is formed, and a pair of second grooves extending to predetermined positions toward both sides from the first groove are formed in a specified layer among the layers through which the first groove penetrates. Furthermore, a material having a refractive index higher than that of the specified layer is filled up in the second grooves, thus forming two portions having a high refractive index.

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